A MONOGRAPH.

Wine and the Bible--Alcohol and Ourselves,

BY

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EXPLANATION.

In introducing an article of unfermented wine for sacramental purposes last fall, I had occasion to call on a large number of the Ministers of the different denominations that are so well represented in Toronto. And, notwithstanding all that has been written on the subject, I was surprised to find that there was no unanimity of opinion; while nearly all were strongly in favor of its introduction for sacramental purposes, a very large number were in favor of the Alcoholic Wines for medicinal and stimulating purposes when the vital forces were depressed, in cases of slight indisposition as well as those of more pronounced illness. I have also become cognizant of the fact that notwithstanding the very pronounced position that has been assumed by the brightest lights in the Medical profession in Great Britain as to its baneful effects, a very large proportion of our representative Temperance men and physicians entertain the views that obtained in the earlier years of the present temperance agitation when alcohol was supposed to afford, in some indescribable way, a positive and much needed strength.

That this view is erroneous, under the light of more recent scientific investigation, and especially of recently discovered physiological truths, is most apparent; and, as my mind has been specially directed towards an investigation of this most interesting problem, I deem it a sufficient apology for offering the public a compilation of these views.

There is also, apparently, a necessity for something of this kind, which can be offered by the various churches and temperance organizations, that have already accomplished so much, as a "campaign document" at a merely nominal price—and a most liberal discount will be made to temperance and church organizations for free distribution.

Public Sentiment.

While most ministers, a limited number of lay-members and a few medical men have investigated the biblical aspect of the wine question, the majority of persons have not given the subject that consideration which its importance demands. If Christ in performing his first miracle at Cana of Galilee made intoxicating wine, and if Paul recommended Timothy to take a little alcohol for his stomach's sake, then we would unquestionably be justified in using alcoholic wine for sacramental purposes, resorting to it as a stomachic when slightly indisposed, and depending upon it as the safest and best of remedies in cases of great prostration. Until within the last few years these views were the universally accepted ones, and they have undoubtedly been the greatest hindrance to the success of the temperance cause with which we have had to contend. It has been the "stumbling block" of temperance workers, and the breastwork behind which the promoters of intemperance have found their strongest position. These deplorable misapprehensions originated in a mistranslation of a few words in the original manuscript of the Bible, and like rank weeds in a fertile soil have been propogated by custom and the teachings of the medical profession, till they have almost wholly pervaded society.

We purpose entering into a discussion on this subject, and by bringing to the surface golden treasures of truth that were buried during the middle ages, conclusively demonstrate that the Bible does not in any way, or to any extent whatever command or sanction the use of this noxious substance; and that the medical profession are in error in prescribing it as they have done in the past, and are to a very great extent doing at present.

Wine and the Bible.

A careful examination of the wine mentioned in the Bible is sufficient to expose the fallacy of the arguments in favour of alcoholic beverages, founded on the teachings of the Bible, and a careful consideration of the texts which are claimed to be favourable to its use lead to a similar conclusion. Intoxicating wine is certainly mentioned in the Bible, and it is equally evident that a kind of liquor translated "wine" is recognized and often mentioned in it which is not intoxicating. Ancient historians preserve a similar distinction, they often speak of wine and its bad effects, and also of unintoxicating wine and its wholesome properties.

The intoxicating principle in wine is due to the alcohol which it contains, and wine which contains no alcohol is not intoxicating. Alcohol is produced by fermentation, and wine which has not undergone fermentation is not intoxicating, since it contains no alcohol; and all that is necessary to preserve it free from alcohol or intoxicating properties is to prevent fermentation. That the ancients understood several methods of preventing fermentation in wine is shown by a reference to history.

Professor Stewart says: "Facts show that the ancients not only preserved their wine unfermented, but regarded it as possessing a higher flavour and finer quality than fermented wine."

Intoxicating Wine.

As already stated the intoxicating element in wine is alcohol, which is produced by the decomposition of sugar in the process of fermentation. Alcohol, then, can be made from any juice which contains sugar. The ancients made intoxicating drinks from millet, dates, beans, palm juice, figs, pears, pomegranates, and other fruits besides the grape. The manufacture of these wines is alluded to by a striking reference in Proverbs xxiii, 31; which Dr. Kitto translates as follows: "Look not upon the wine when it is turbid, when it giveth its bubble in the cup, when it moveth itself upright." This is somewhat different from our translation and shows how, in the English version, the nice distinctions in the original are often obscured or wholly lost. In the original text different words have reference to as many different wines, which in our version are all rendered "wine," "strong wine" and "strong drink." The principal words thus employed are *yayin*, *shekar* and *tirosh*. These words, as well as others having reference to the same thing, have been carefully examined by Moses Stewart, the Rev. William Richie, of Scotland, Dr. Lees, of England, Dr. Kitto and others who are considered good authority on this highly important subject.

Yayin—It appears that this word is generic, and was applied to the juice of the grape either before or after fermentation had taken place, in the way that we use the word "cider" in speaking of it when new and hard. The Greek word *Oinos* corresponds with the Hebrew *Yayin*.

Shekar means sweet, and was applied to the juice of all fruits excepting the grape. It is sometimes translated "honey;" it more frequently refers to the juice of the palm or date, and like *Yayin* it includes the fermented as well as the unfermented juice.

Tirosh was applied to the ripe fruit of the vine and also to the fresh juice of the grape before fermentation had begun. It is often translated "new wine."

Briefly, *Yayin* means fermented or unfermented grape wine. *Shekar* means fermented or unfermented wine made from the juice of the palm, date, or other sweet fruit than the grape. *Tirosh* means the fresh fruit of the vine, or the unfermented juice of the grape.

The Rev. William Richie says:—"*Shekar* means luscious drink or sweet syrup, especially of sugar or honey, of dates or of the palm tree. The Hebrew word is usually rendered by the translators of our English 'strong drink.' This is not a happy rendering of the original term. The epithet 'strong,' for which there is nothing equivalent in the Hebrew, conveys the idea that the drink is highly intoxicating; but *shekar* of itself conveys no such idea. We examine the passage where it is used, and find it in numerous instances spoken of along with *yayin*; and as we know this latter word is a general term to denote the juice of the grape, we conclude that *shekar* is a general name for liquor made from dates, grain, or other fruits, the produce of the vine excepted."

Moses Stewart, the Biblical critic, says of *yayin* and *shekar*—"Both words are generic. The first means vinous liquor of any and every kind. The second means a corresponding liquor from dates and other fruits, or from several kinds of grains. Both liquors have in them the saccharine principle, and therefore they may become alcohol, but both may be kept and used in an unfermented state."

This view is confirmed by the fact that *shekar* is employed in the original of Numbers xxviii. 7, where it is translated "strong wine." It is a well known fact that nothing containing the smallest quantity of leaven or in which fermentation had taken place was ever employed in offerings which were of a typical character. This of itself is sufficient evidence that the wine referred to was certainly not fermented.

Another fact which bears strongly on this point is that the word "sugar" in many different languages is derived from the same root. Says Dr. Lees: "The Arabic *sakkara*, the Sanscrit *sarkara*, Tamool *sakkara*, the primitive of which signifies sweet salt, are chiefly identified with the Hebrew *shekar*. The Persian *shukker*, the Greek *sacharon*, and the Latin *sacharum* lead to a similar conclusion, as well as the Indian *sachary* and *shuker kund*, from which last our sugar candy. Now all these similar derivations would have been impossible if the original root had not signified sweetness. The affinity is also traced in the modern languages. The Spanish and Portuguese word for "sugar," derived through the Saracens from the Arabic *sukkar* by adding *a* or *al* (as in *alcohol*) is *azuker*, and the common word *molasses*, is an abbreviation of the phrase *mel de assukar*, honey of sugar. From the Latin we have our own *saccharine*, the German *zucher*, the French *sucre*, the Italian *zucchero*, and from the German our common word *sugar* and *sukkar* (sweet meat.)"

A candid examination of the meaning of the original words translated "wine" in our version of the Bible places the matter beyond the possibility of a doubt: instead of giving any license for the use of alcohol or fermented drinks of any kind, it proves conclusively that their use is entirely without the sanction of Holy Writ.

Sacramental Wine.

The following is one of the texts that are said to favour the use of wine: Numbers xxviii. 7,—"In the holy place shalt thou cause the strong wine to be poured unto the Lord for a drink offering." Both the Jewish custom of discarding all articles that had contained leaven in their sacred (including the marriage) ceremonies, and the original *shekar* from which "strong wine" is derived, lead to the inference that reference in this passage is made to a "sweet wine" which our version should have given us. This view is sustained by Dr. Kitto, who says: "The article referred to in this text was a sweet juice derived from the palm tree, or any sweet fruit other than the grape." That this view is correct is conclusively proved by an eminent Jewish Rabbi, Dr. Isaacs, who says of the Jews: "In their oblations and libations, both public and private, they employed the fruit of the vine, that is, fresh grapes or unfermented grape juice." To the Jews, fermentation is always a symbol of corruption, and according to Plutarch the Egyptians used only unfermented wine in their sacrifices.

Judges ix., 13—"Wine which cheereth God and man."—The original word here is *tirosh*, which, as has been shown, meant grapes or the fresh juice, either of which possesses vitality, and is known to refresh and sustain those who partake, without intoxication or injury.

Psalms civ., 14, 15—"He causeth the grass to grow for the cattle, and herb for the service of man, that he may bring forth food out of the earth: and wine that maketh glad the heart of man, and oil to make his face to shine, and bread which strengtheneth man's heart." The wine referred to here must have been unfermented, for it is represented as a natural product, like grass, the herb, oil and bread; which could not have been the case if fermentation had taken place, it being a process of decay and not of growth. The Creator never made alcohol in any form, it being the result of a destructive process. No plant produces it; no bubbling spring affords it. It is always the product of decomposition, decay, death, and rottenness.

Proverbs xxxi., 6—"Give strong drink to him that is ready to perish."—This text is often quoted as an apology for using alcohol as a "stomachic" and as a medicine, though at most it could only be used in justification of the use of wine in cases of threatened death. A proper understanding of this text is most important. "Strong drink" could not have had reference to distilled liquor in the sense that that term is now used, for the process of distillation was not discovered till the ninth century. This term then does not mean a liquor strong in alcohol, as rum or brandy. It refers to a liquor sometimes referred to as "mixed wine" which was a compound of wine with wormwood, myrrh, nux vomica, and other narcotic drugs. These highly narcotic preparations were given to criminals who were about to be executed, in order to stupify them and thus mitigate their sufferings. In accordance with this common custom a draught of a powerful opiate of this kind was given to our Saviour as he suffered on the cross. And it was to this well-known custom that Solomon had reference when he said "give strong drink to him that is ready to perish." The two preceding verses are a protest against wine drinking, and in this, the sixth, the inference is that *wine* of any kind should not be taken till hope had vanished, and then for the purpose of stupifying, as surgeons in our day give chloroform to patients about to undergo a surgical operation.

Matthew xi., 19—"The Son of Man came eating and drinking, and they say, 'Behold a man gluttonous, and a wine-bibber.'" It will be admitted by all that

Christ drank wine; but there is not a particle of evidence that He ever drank fermented wine. Sweet wines, which the ancients knew so well how to preserve, were drunk to excess by many persons: these were known as "wine-bibbers;" but there is not the slightest reason to suppose Christ was one of these. This charge was made by his enemies, who accused him of gluttony, and also said "He hath a devil." The authority that would substantiate one of these charges would sustain the whole of them.

The First Miracle.

St. John ii., 9, 10—"When the ruler of the feast had tasted the water that was made wine, and knew not whence it was (but the servant which drew the water knew), the governor of the feast called the bridegroom, a d sai n unto him Every man at the beginning doth set forth the good wine, and when men have well drunken, then that wh ch is worse; but thou has kept tue good wine until now."

(1) If the wine here referred to was an intoxicating wine, manufacturers of, dealers in, and users of alcohol have a sufficiently authoritative excuse for their work: for in poisoning men, ruining their constitutions, squandering their properties, making widows of their wives, and orphans of their children, they are but following the example of their Divine Lord and Master. Such a supposition is too monstrously absurd for a moment's consideration. The work of rum is the work of the devil, and Christ's character stands diametrically opposed to all hellish and injurious practices of whatever name or nature. It is impossible for any but the veriest infidel to suppose that Christ would lend his influence and example to a work that has never been anything but an unmitigated curse to the human race.

But how was this miracle wrought? Simply by suspending the laws of nature, and performing instantaneously what is usually brought about in a few months under those laws. Under the influence of a favourable soil, moisture and sun-light, the elements of growth are sucked up by the rootlets of the vine, and in process of time elaborated into ripe and luscious fruit, all of which, the juice included, contains vitality, and is capable of sustaining mankind when used as food; and Christ by His divine power accomplished at once what is usually brought about in course of time under natural laws. Does alcoholic wine stand in any such relation to the human system? Certainly not. It has been shown that in order to produce alcohol fermentation must take place and that this is a process of death, decomposition, decay, and rottenness. The vitality that God in His creative power has endowed the fruit-juice with, must first be destroyed. The produce of his creating hand must be resolved back into the simple elements of which it was composed, each one of which constitutes a poison. It is then that these poisons, carbonic acid and alcohol, are ready for their mission of converting intelligent human beings into fiends and lunatics. The former enters the lungs but to deprive the blood of its natural vitalizer, oxygen; the latter the stomach, only, like a two-edged sword to deal out death and destruction to the corpuscles and assimilated living structures with which it comes in contact.

(2) The governor of the feast pronounced the wine made by Christ the *best*, saying "Thou hast kept the good wine until now." Now, we can settle this question definitely by ascertaining which kind of wine the Jews considered BEST; and an appeal to recognized authority will do this.

Says Dr. Jacobus: "Those were considered best wines which were least strong."

Moses Stewart says that the ancients considered unfermented wines "as of a higher flavour, and finer quality than fermented."

Dr. Kitto says of wine which had been preserved from fermentation by boiling, "such was esteemed by the Jews the richest and best wine."

Dr. Isaacs, an eminent Jewish Rabbi, bears the following testimony on this subject: "The Jews do not, in their feasts for sacred purposes, including the marriage feast, ever use any kind of fermented drinks."

Certainly no sane man will conclude, in view of this testimony, that the wine which Christ made at the wedding feast, and which the governor of the feast called "the good wine" was fermented, but *un*fermented, which the Jews considered not only harmless, but nourishing.

Wine at the Passover.

It is an important question for the temperance and religious world to decide, was the wine used at the passover fermented or unfermented? All Christendom has acted upon the supposition that it was fermented, and has used this kind of wine for Sacramental purposes. If we can ascertain what kind of wine the Jews used for this feast we shall be able to settle the question satisfactorily. The following will aid us in deciding the matter:

(1) The process of fermentation is one of putrefaction and decay. This was understood by the ancients, and also that fermentation was occasioned by leaven or

ferment. (2) Not only was leavened or fermented *bread* forbidden during the passover, but all fermented things. Says Dr. Kitto: "All fermented substances were prohibited during the paschal week of the Jews, and during the succeeding seven days." Hence the passover was called the feast of the unleavened, the word "bread" not having been found in the original. (3) If the body of Christ was necessarily represented by bread which was absolutely free from ferment or leaven, surely his blood "*which is the life*," should be represented by wine equally free from putrefactive elements. This, together with the whole import of Christ's character and teachings, justifies us in the belief that the communion wine used by our Lord was wholly free from alcohol.

A Creature of God.

Timothy iv., 4—"For every creature of God is good." Fermented wine is not a "creature of God." Alcohol is produced by the decay of God's *creatures* produced under the laws of growth. His "creatures" are resolved back into the simple elements of which they were composed. Unfermented wine, the fresh juice of the grape, *is* a product of His *creative* power under the laws of growth. This is shown in the 104th Psalm previously quoted.

Paul's Advice to Timothy.

I. Timothy iv., 23—"Drink no longer water, but a little wine for thy stomach's sake."

This text is looked upon by the moderate drinkers as sanctioning their practice, and is considered their stronghold. How do those who seek consolation from this source stand? (1) It was necessary for Paul to advise Timothy to "take" or drink wine, which is conclusively indicative that he had not been in the habit of drinking wine of any kind. (2) Paul recommended it because it contained nourishing properties, which water does not, it being only the vehicle in which the nourishment floats. (3) The wine recommended was such as would be good for Timothy's stomach, else it would not have been advised. Alcoholic liquors are notoriously bad, even for a healthy stomach. The injury that it inflicts is diminished in proportion to the per centage of water it contains. It destroys the properties of the gastric fluid, which is the active agent in promoting digestion, by precipitating the *pepsin* of that fluid, thus chemically destroying it. The nervous energy required in digesting the food is expended in expelling the alcohol from the vital domain, and the manifestation of the vital power thus wasted is mistaken for a production of vital force. This has been the "stumbling block" of the medical profession, and through its teachings the people have been deceived, deluded, and destroyed. On the other hand, unfermented wine has just the opposite properties. It is a most wholesome and nutritious article, and was much esteemed in the days of Paul and Timothy for the very properties for which Paul recommended it. The conclusion is irresistible that the wine recommended was unfermented.

This position is confirmed by Athenæus, who recommended "sweet wine" as being "very good for the stomach." Paul certainly could not have recommended fermented wine for Timothy, for Pliny, Philo, and Calumella, in speaking of fermented wine, say they produced "headache, dropsy, madness, and stomach complaints." Who will believe that Paul advised Timothy to use the very article that would cause his stomach to become diseased if it were not so before.

I. Timothy iii., 8—"Not given to much wine."

Moderate drinkers claim to find in this and similar texts ample support for their practice. They argue that Paul didn't condemn the use of wine, but only its excessive use. In many instances, sweet or unfermented wine was taken frequently, and at irregular periods. This practice deserves censure as much as eating too much or between meals, constituting gluttony, and it was this practice that Paul was condemning. It is not at all reasonable to suppose that he was endeavouring to teach the use of alcoholic wine, knowing, as he must have known, their baneful effects.

ANOTHER CLASS OF QUOTATIONS.

We have shown that two kinds of wine are recognized in the Bible, one of which was wholesome the other injurious, though often referred to by the same word or term. It is only reasonable that when wine is spoken of in terms of commendation that which is wholesome is referred to; and, that when the opposite terms are used the injurious kind is indicated. This idea should be born in mind in considering the following texts of scripture, which are a few of those that condemn the use of wine.

Proverbs xx. 1st—"Wine is a mocker, strong drink is raging: and whosoever is deceived thereby is not wise." The language of this wise man is as expressive as it is truthful.

Isaiah v. 11—"Woe unto them that rise up early in the morning that they may follow strong drink, that continue until midnight till wine inflame them." This is verified again and again in the downward course of the drunkard. That little word "WOE" is a most expressive one. It foreshadows suffering, misery and death. We quote agai from the "Wise Man."

Proverbs xxiii. 21—"For the drunkard and the glutton shall come to poverty." xxiii. 29, 30—"Who hath woe? Who hath contentions? Who hath babbling? Who hath wounds without cause? Who hath redness of eyes? They that tarry long at the wine; they that go to seek mixed wine." This is a most vivid picture; and none will dispute its accuracy except those that are under the influence of this deciever and mocker. Proverbs xxiii. 31, 32—"Look not thou upon the wine when it is red, when it giveth his color in the cup, when it moveth itself aright. At the last it biteth like a serpent and stingeth like an adder." This is a most precise description of fermented wine and its baneful effects. It is very common to hear, young men especially, say "I can take a glass or let it alone." The advice of this wisest of men is "*Look* NOT." The import of these words is to avoid tampering with it in any shape, as you would with a venomous reptile whose sting would be certain death. It first deceives, then 'mocks,' and at last it "biteth like a serpent and stingeth like an adder."

Romans xiv. 13—"But judge ye this rather, that no man put a stumbling block or an occasion to fall in his brother's way." Wine is not mentioned here; but it is a vigorous rebuke to the moderate drinker, whose respectability leads their example to be followed by young and promising men in all classes of society, who would never think of following the example of the confirmed inebriate. Moderate drinkers are "stumbling blocks" to one another, but especially to their weak companions, who with themselves are in the ranks from which our future drunkards emanate. The very common practice with ladies of offering wine to their guests on holiday and festive occasions is by inference strongly condemned by this passage as well as by the whole teachings of the Bible. "*Woe is me if I preach not the Gospel*" *of Temperance* must be the conviction of all who examine the Bible in reference to this gigantic evil. Ministers of the Gospel, Medical Men, Teachers, and Leaders in society generally, arouse from your slumbers; for assuredly you will be held to a strict accountability for the course you take in this matter. Easy indifference may appear very well here where spurious coins are passing currently, but I fear the consequences when we shall be "judged according to our deeds."

The following contrast illustrates at a glance the differen e in the qualities of the two classes of wine mentioned in the Bible:

GOOD.	BAD.
Unfermented.	Fermented.
Contains no Alcohol.	Contains Alcohol.
Is Wholesome.	Is Poisonous.
Unintoxicating.	Intoxicating.
Is produced by natural growth or under vital laws.	Is produced by the death and decay of what originally contained life.
Is a symbol of blessing.	A symbol of wrath.
"It cheereth God and man."	"Wine is a mocker."
"Use a little for thy stomach's sake."	"Look not thou upon the wine when it is red"
"And wine that maketh glad the heart of man."	"Strong drink is raging." "Poison of Dragons." "Venom of Asps."
"It maketh the heart glad"	"It biteth like a serpent and stingeth like an adder."
"And He took the cup and gave thanks, and gave to them saying, drink ye all, of it."	"Woe unto him that giveth his neighbor drink, that puttest thy bottle to him."

The good wine possesses vitality, is nourishing, contains the elements required to rebuild the structures of the body, was created for our special benefit, and, we are encouraged by the general import of Holy Writ, and by Christ's example, to use it. The bad wine is deprived of its vitality by fermentation, death and decay, cannot nourish the body, wastes our energy by arousing the vital forces to expel it as a poison, and the general inference to be drawn from inspiration condemns it. The mistake which all Christendom has made in judging this matter, has evidently been the bane of all ages, and has entailed untold misery upon the human family. The use of Alcohol to any extent whatever leaves a winrow of death behind it. Its moderate use is death to the blood corpuscles with which it comes in contact, its freer use is death to the living structures of the body, and its excessive use produces literal death to its victims. The power expended in opposing its presence in the vital domain has been mistaken for a production of needed strength.

The use of Wine by Biblical Characters.

If it is still persisted that wine of an intoxicating nature was used by some of the most prominent characters of the Bible, we have only to glance at its effects to see the absurdity of taking such a course an example to be followed. It will be noticed that its effects were only evil whenever any effects were recorded.

Noah's Drunkenness.

Gen. ix. 20, 21—"And Noah began to be an husbandman, and he planted a vineyard; and he drank of the wine and was drunken; and he was uncovered within his tent." This is the very first mention that is made of wine in the bible, and its effects upon Noah shows that it was intoxicating. It dethroned his mentel powers to such an extent that he lost all sense of propriety, and fell into a state of indecent exposure in his tent during his insensibility. This unfortunate occurrence also became the occasion of national misfortune to one line of his descendants, through the disrespect of one of his sons. There is no doubt but the first effects of the wine was exhilarating, calling out the vital nervous energies to expel it, he was deceived into the belief that it afforded some special advantage which ordinary food did not afford; but, that it also "blunted" the finer sensibilities of his nature, which should always be acute and active, is also quite apparent. In this instance there is certainly nothing to recommend the use of intoxicating wine.

Lot's Shame.

This is the next undisputed mention of wine, which is in Gen. xix. 34, 36—"In this instance the wine was doubtless of the kind called "mixed wine," which possessed most powerfully intoxicating properties. The effects here does not recommend the use of intoxicating wine.

Nadab and Abihue.

Aaron's two sons, while under the influence of intoxicating drink, disobeyed the express command of the Almighty by offering strange fire upon the altar. In consequence of this daring act of disobedience they were suddenly smitten with death by the hand of the Lord, who evidently designed by this summary act of justice to render them an example to succeeding generations. This is a most striking illustration of the influence of Alcohol to debase the spiritual feelings, and, also, of God's displeasure towards those who are entrusted with spiritual duties, and who place themselves under its baneful influence. Physiological facts inevitably point to the conclusion that its indulgence to any extent whatever disturbs the superior portion of the brain, which is devoted to a recognition of moral and spiritual interests, by exciting the base, which is that portion that relates us to a physical existence, and the passional influences. It certainly will not be argued in any of these cases that the use of "intoxicating" wine was beneficial?

The Total Abstainers of the Bible.

Let us now inquire into the dealings of God with those who discarded the use of wine. While there is no evidence in the Bible that the use of "intoxicating" wine ever did, or ever could, do any one the slightest possible good, we have the illustrious example of some of the most eminent biblical characters as total abstainers.

The Israelites.

During the sojourn of the children of Israel in Egypt, they were undoubtedly total abstainers, since their masters, the Egyptians, at that time made no use of any fermented liquors. And during their sojourn in the wilderness they were of necessity abstainers, their only drink being the purest water from the "rock." To this long discipline of temperance might be largely attributed that hardihood and fortitude coupled with bravery, which enabled them to sweep out with astonishing rapidity the enervated nations of Palestine, who had wasted their energies by intemperance and riotous living, and were thus easily vanquished, though protected by strong walls and fortresses.

The Nazarites.

At the time of the establishment of the ceremonial law, there was also established an Association of total abstainers, which were called Nazarites. They dedicated themselves wholly to the service of God; and one of the conditions of dedication was the total abstinance from the use of wine. To insure a perfect observance of the pledge all wine was prohibited whether fermented or not. Many of the finest personages of the Bible were members of this class or order. And it is most probable that Daniel and his three Hebrew brethren were Nazarites, as they refused to drink the King's wine, preferring pulse and water.

Samson.

This Hebrew Hercules was an abstainer from wine from his birth, and physiologically, facts point irresistibly to the conclusion that his progenitors had strictly observed this vow. His muscles were not degenerated by the deleterious influence of intoxicating liquors, or his nerves paralyzed by stimulants. He was a Nazarite, and is a striking illustration of the incompatibility of Alcohol with strength.

The Rechabites.

This association was a sort of family temperance society. They abstained from the use of wine because commanded to do so by their fathers; and the Lord commended them for their consistency. What a noble example for the sons and fathers of the present day.

The Essenes.

The class of Jews known by this name were very temperate in all their habits. They were strict teetotalers, carefully avoiding the slightest indulgence in fermented drinks, and were noted for their rigorous piety. Josephus mentions them as passing lengthy periods in the wilderness, far from the haunts of men, for the purpose of alienating themselves from the customary habits of eating and drinking. This eminent historian was so impressed with the purity of their lives that he spent three years in this way himself, and testifies to its elevating tendency in purifying the thoughts and subduing the passions; and there is no evidence that he ever used wine after this experience.

HISTORY as well as the Bible furnishes numerous instances in which temperance has resulted in astonishing powers of body and mind.

MILO, a famous Greek, who is said to have outrivalled Samson in his prodigious strength, was a total abstainer, using neither wine or animal food.

Pythagoras,

One of the most renowned of ancient philosophers, was an advocate of total abstinence. Neither himself nor followers made any use of wine. He formed associations 550 years before the Christian era, and associations based upon the Pythagorean philosophy, were quite numerous up to the time of Alexander the Great. It was under this school of philosophy that the Greeks and Macedonians arrived at their acme of fame as nations.

The relation of the Bible to temperance may be summed up in the following conclusions, to which the evidence presented must lead us: (1) The use of intoxicating drinks is not *commanded;* (2) The use of fermented wine is not *recommended*; its use is not countenanced as a *harmless practice* or a *necessary evil*; (4) total abstinence is not *condemned*; (5) Many texts *commend abstinence*, and not a few *command it*; there is nothing in the Scriptures that *disagrees with the principles of total abstinence* and *nothing that sustains moderate drinking*; (7) Hence the Bible, the revealed word of God, *agrees with science* and *experience in denouncing the use of intoxicating liquors* and *commending temperance.*

In the face of these facts can any person who has a particle of faith in the inspiration of the Scriptures and in man's accountability to his Maker, continue to indulge in the use of intoxicating liquors to any extent whatever?

ALCOHOL AS FOOD.

Temperance advocates have almost invariably made a mistake in admitting that alcohol affords advantages when taken as a "medicine," for in cases of great prostration, as in all other cases, the effects claimed to be produced by it are so analogous to that of nourishment that medical experts cannot distinguish between them, hence the differences of medical opinion, as quoted by "Microscope" and "Prohibitionist," in their late passage at arms in the *Globe.*

Experience has not, nor is it likely to settle the matter satisfactorily to all parties. Observation, and a feeling of exhilaration after its use, have alike led medical men and others to conclude that in cases of great prostration it affords, in some indescribable manner, such advantages as should not be dispensed with when life is endangered. And the representative men in our various temperance organizations have not felt safe in taking a stand against its use "as a medicine," while those who are "pushing" the liquor traffic all admit that its *excessive* use is productive of all the harm that is inflicted on society by its devotees. The only difference really existing between the opinions of the contending parties is one of quantity, and as this is a "free country" every one must be allowed to decide how much is required for his special benefit. The consistent (?) "temperance man" advises that a medical man may be asked to prescribe the quantity and state at what times it shall be taken; while the "temperate" man deems

himself competent to attend to this little matter for himself; so that the inebriate and the debauchee are the natural fruits of the latter, as he is the plant derived from the former.

If we can ascertain (1) what Alcohol is? which can be done by comparing it with recognized foods; and (2) what the action is, and where it originates when it is brought into contact with the living structures? it will enable us to solve the problem of its "food" and "medicinal" properties. Medical Science was wholly in favor of its use when we emerged from the period of the "middle ages." Since that time investigation and research have enabled us to know more of natural laws, and a better understanding and more definite conclusions ought to obtain with those who assume to be the exponents of public opinion on this matter, as all the points on which its solution depend are admitted by those who have kept abreast with modern investigation. The "Dispensatories" of all countries agree as to its general characteristics when pure.

Wood's U. S. Disp. says:—Alcohol is the intoxicating ingredient in all spirituous liquors, including wine, porter, ale, beer, cider and every other liquor which has undergone *vinous fermentation*. This occurs at 60° to 70° Fah., when the sugar—cane or grape—is converted into carbonic acid gas and alcohol." The American Disp. says:—"Undiluted it is a powerful stimulant and irritant poison, rapidly causing intoxication, and, in large quantities, death." The French, British and Dublin Disps. say the same; and no eminent medical authority disputes this position when referring to it in its pure state. Water, in its pure state, presents no such characteristics as are ascribed to alcohol: but was designed by nature as the vehicle in which all nutrient elements are floated to their destination for assimilation, and, in which all the worn out material of the tissue, as well as other foreign matter, is carried to the depurating organs for elimination. When a small percentage of alcohol is secreted in water its true character becomes obscured to the general observer, hence the disputes in reference to its chameleon like character.

Alcohol does not grow like other recognized foods, and no bubbling spring affords it. It is a product of fermentation, which is a process of death, decomposition and decay of what originally contained life, having been organized under vital laws. Alcoholic beverages contain different percentages of alcohol, ranging from two and a half to four in lager, and forty to fifty-four in the different distilled spirits of commerce. If it is claimed that these beverages contain other nutrient properties than alcohol, why so much effort to defend it? But do they contain nutrient properties? Let us bear in mind a fundamental principle in nature—that foods possess VITAL PROPERTIES, having been organized under the laws of growth. This position is sustained by all naturalists, who agree that the animal kingdom, man included, must derive their food from the organic world. This general principle is also recognized by the instinctive intelligence of the entire animal creation, including the savage and civilized races of men. Another important question presents itself; can vitalized substances exist as such in contact with alcohol! I shall quote a few authors on this point, and would say parenthetically that the conclusions arrived at were not the ASSUMPTIONS of mistaken men who possibly enjoyed an occasional "smile;" but the unmistakable language of natural laws.

Pereira, in his Materia Medica, says:—"On plants alcohol acts as a rapid and fatal poison." Is the fact of its being "a rapid and fatal poison" to the vegetable kingdom evidence to "Microscope's" mind that it is "food" for the animal? This eminent author says, also, that "Leeches immersed in spirit die in two or three minutes."

Fontana says:—"When half the body of a leech was plunged into spirit, this part lost all of its motion, while the other half continued in action." This experimentalist also states that "spirit killed frogs." "Applied to the right crural nerve of a frog, it destroyed the power of the animal to move its right foot." Dr. Munroe states, "When applied to the hind legs of a frog it diminished their sensibility and mobility."

Fontana states, "Turtles were killed by spirits administered through the stomach, or injected beneath the skin." "Before death the animal became motionless."

Flourens found that birds lived longer with their brains laid bare and partly removed, than when alcohol was injected into their stomachs. "The senses were retained when the cerebellum was removed, while alcohol destroyed them." Its effects on fishes is similar to what it is on other animals, as Pereira proved by numerous experiments. He "injected four drachms of alcohol into the jugular vein of a dog," which caused the "blood to coagulate and produced instant death." Introduced into the stomachs of cats, dogs or rabbits it produces apoplectic conditions. He also says:—"The effects of alcohol on man are those of a powerful caustic and irritant poison." "To whatever part of the body (of man) alcohol is applied it causes contraction and condensation of the tissues, and gives rise to pain, redness, heat and other symptoms of inflammation." This eminent authority names many diseases as the result of the habit of using alcoholic liquors, among which are "mania, delirium tremens, insanity, tuber-

cals of the liver, inflammation of the stomach, granular disease of the kidneys, apoplexy, &c."

In face of all this testimony such men as "Microscope" assume, for they cannot prove, that alcoholic liquors possess an "ailmentary principle." These assumptions are the result of observing and experiencing the increased feeling of strength immediately after it is taken into the system, and a belief in its nutrient and medicinal properties is instilled into the minds of children from the associations of their earliest recollections. This, with frequently more than the tacit admission of ministers and temperance representatives, together with the continuous dinning of the "medical authority" argument has been the means of propagating a "sentiment" in the minds of the rising generations that its moderate use was productive of great advantages, and, that the only thing to be guarded against was its immoderate indulgence. The self-reliance that is so characteristic of young men prompts the conviction that they can easily control themselves, and thus secure the benefits without incurring the dangers that have befallen so many others. Surely it is time for every person, whatever his or her position may be in society, to address themselves to an investigation of this liquor problem, which has properly been designated the "crime of crimes."

It must not be forgotten that the characteristics of alcohol are bad; that its production depends upon a method diametrically opposite to that by which food is produced; one is the result of growth, the other that of death. That foods impart life to the animal kingdom, while alcohol causes the death of; or tends to destroy everything possessing life. Bearing these, not assumptions but established facts in mind, let us examine the organization of, and laws that have been instituted to govern us, and compare and deduct, even "reason with a class that have already prematurely and sententiously made up their minds." If we can do this as well as nature has done her part in imposing and enforcing a penalty for its use, we shall not have labored in vain. And if we do not succeed in carrying entire conviction to the minds of those that have contaminated and defiled their mental and moral status by embracing this pernicious habit, we shall still entertain the conviction that the shortcoming is not on the part of nature's inexorable laws, but with themselves.

If "Microscope" was contemplating a journey to Europe, would he insist on having a stage coach and sailing vessel for the occasion, or would he avail himself of the advantages that a better knowledge of natural laws have afforded, and take a railway coach and ocean steamer? His newly concocted batch of faded fallacies were as flippantly quoted before the power of the modern steam engine was discovered as to-day. Modern research has established the correctness of many newly discovered and interesting physiological facts, which, if properly presented should aid us in "ravelling" these much muddled mysteries of "alcoholic food" and "medicine."

Perfectly organized children come into the world with a comparatively perfect cerebro-spinal system, though a few cases are recorded in which this structure was wholly wanting. Thus nature, in her abnormal exploits, has aided in demonstrating what appeared to border on the impossible. The function of the *organic* or *involuntary* nervous system, which is composed of the numerous ganglia that are so abundantly distributed throughout the body and their connecting fibres. While the cerebro-spinal system takes cognizance of our external surroundings, the ganglia and their minute filaments, which are distributed to each surrounding part of the body, preside over the internal economy, supervising the entire vital processes, consisting of digestion, circulation, aeration, assimilation and depuration, which are its *normal* duties. When the distribution of vital nervous energy is equal all of these duties are properly performed, and the individual is in physiological, normal or healthful conditions. This system of nerves and its servants, the digestive apparatus, and circulating and respiratory systems, manufacture tissue for, and thus supply nervous energy to itself, and also for the cerebro-spinal system—brain, spinal cord and their distributing branches—and also for the physical—bones, tendons and muscles. When anything is introduced into the vital domain, or comes in contact with it externally, that seriously disturbs the vital processes, the supply of nervous energy is immediately withheld from the mental and physical systems, though there may be an abundance of latent energy, as there always is in health, stored up in the vital depository, the ganglia. These facts must not be lost sight of, as they assist in solving many problems that have been looked upon as "medical mysteries." They also illustrate how professional men, as well as others, may be mistaken in concluding that persons who have swooned, or partially lost their muscular or mental powers "would have died" if alcohol or other stimulants had not been resorted to.

"Microscope" endorses the whole of Dr. Inman's eight assumptions that alcohol is food, the first of which is: "Nature has provided in the salivary glands, the liver and the lungs of every animal an apparatus for converting all food, especially

farinaceous, into alcohol, and we have no evidence that such conversion does not take place." That this is simply an assumption is shown by the last clause, while the previous part irresistibly leads us to the conclusion that "Microscope" does not know the difference between digestion and fermentation. Here is an attempt to make out in some indescribable way that alcohol is a product of vitality, when it is a well known fact that it is always a product of fermentation, death or loss of vitality, with which the food was endowed under the laws of vegetable and animal growth, which can take place in the stomach as well as a mash-tub or wine-vat. We will illustrate by tracing the two processes. When properly selected food, which must possess vitality, is introduced into the stomach, if all the necessary conditions are supplied, the saliva and gastric fluid are respectively secreted from the arterial blood and are also endowed with vital principles. These fluids immediately "sieze" upon the food, imparting to it a still larger fund of vital endowment, as the "transformation" proceeds. After the "chyme" leaves the stomach it comes in contact with other "secretions," which are also derived from the arterial blood, and also possess vitalizing properties. When the intestinal digestion is completed and the messenteric and other glands through which the food elements pass, have stamped their impress upon them, the *semi-vitalised* "corpuscles" are precipitated into the general circulation, where the "vitalizing" process is completed by their contact with the oxygen of the blood, provided always that there is a sufficiency for such purpose. How different this from fermentation, which is death to the food, and is always necessary to produce alcohol. All that is necessary in such a temperature as is maintained in the stomach, is to delay, for a short time only, the vitalizing process of digestion. In this case the food, as such, is destroyed, becomes highly offensive to the vital intelligence and is carried beyond the precincts of the body through the depurating outlets. Under this death alcohol is a product of the saccharine element in the food, as well as the *starch* of the "especially farinaceous" which is first changed into glucose or grape sugar, then into alcohol; not by the "salivary glands, the liver or the lungs," but by the death and decay of the food that had previously contained life. Another matter claims our serious attention in this connection, which is that the superabundance of sugar so frequently partaken of by children as an article of food, may be converted into alcohol and do its deadly work by destroying the corpuscles, and corroding the tissues with which it comes into contact. This accounts for the frequent cases of defective nutrition, resulting in decayed teeth, flabby muscles, indisposition, and often death.

"Microscope" and his confraternity must come down from their "stilts" under the light of modern research and condescend to notice the difference, not only between digestion and fermentation, but physiological and pathological conditions generally. The conditions, "fatty degeneration of the liver and kidneys, gall stones, and atheroma," cited in his first effort, an extract from the "National Dispensatory" manifests a lack of modern research that would be inexcusable in a medical tyro. These are all diseased conditions, and if allowed to go on foreshadow an early death; yet he cites them as an evidence of the food value of alcohol. Need we wonder that under such a *regime* the "dispensations of Providence" make frequent demands for the sacrifice of our loved friends? It would be miraculous indeed when we remember that violations of instituted laws must be followed by the prescribed penalty if such were not the case.

It is claimed by those who defend its "food" properties that it (1) promotes the development of adipose tissue; [2] prevents the waste of muscular and nervous tissue, [3 and is heat forming.

[1] The sense in which "development" is used means growth. Foods contain carbon in the shape of sugar, starch and animal fat. The latter is abundant in proportion as the animal is made unfit for vigorous effort, which condition is "pathological" or diseased. Starch is found in all grains and in many esculent roots, as potatoes, yams, etc. Sugar abounds in all fruits, grains and roots. Each of these forms of carbon are acceptable, and are deposited in the vital processes as "animal fat," which is *not* a vitalized tissue, but a deposit of adipose matter in the cellular tissue or "oil sacs," the legitimate function of which is to prevent "friction" in the soft structures when the individual is in motion. The quantity required for this purpose is very limited, as is shown by the power and endurance of spare persons as compared with stout ones, and is abundantly supplied in all forms of food, as an "alimentary principle" having been "organized" under the laws of growth it is proportionate to the other alimentary principles. The carbon thrown into the veinous circulation that results from the worn out structures is an "effete" substance, and must be eliminated through the depurating organs or the blood becomes diseased. The reason of this is that this form carbon is a form of animal decay, is a poison in every sense, and should be "thrown

off" as all other "effete" matter should be. When this is not done it is retained in the circulation, which loses the scarlet brilliancy peculiar to pure arterial blood. The vital instincts recognize this, and the depuration through the lungs and skin being insufficient for its removal it is deposited in the "oil sacs" or cellular tissue in order that the circulation may be kept "clear." The *vital* nervous energies are overtaxed and resort to this method as a matter of expediency in order to prevent the arterial blood from becoming thick, and incompetent to nourish or rebuild the various tissues upon which a continuance of good health depends. (2) This is purely a pathological condition, but the defenders of the "food" properties of alcohol, instead of foreseeing the evil that must inevitably ensue, in their dreamy contentment assume that this is a condition of health, and merely because the ordinary size of the individual is maintained. Their comprehension does not extend beyond the surface of the body. All of the grand forces acting within us, and which constitute us the "image" of God, are unrecognized, or, if recognized at all, so little understood as to afford no practical advantage whatever. Every act that we perform, whether vital, physical or mental, is done at the expense of living tissue; and, as adipose matter is *un*-vitalized, its function being that of a passive lubricant, it is impossible that alcohol, which only promotes its deposit, can take the place of food to any extent whatever. I am aware that to these "muddlers" this mystery is inexplicable. They observe an individual taking but little food with frequent alcoholic potations, maintaining, and not infrequently increasing their bulk, and, child-like, conclude that because they are not getting "thin" they are "healthy." The extra drafts thus made upon their capital stock of vitality are duly honored, and for a short time everything goes on, to the superficial observer, very smoothly. Soon there are erratic mental manifestations, and "he is working too hard," or "has trouble," etc. If he can now be induced to discontinue his "drams" it will be seen how rapidly his bulk will diminish, though he takes all the food the appetite demands. The vital forces are engaged in removing the debris of broken down tissue, and a reparation of the neglected structures will be commenced, and, if not blessed with a specially agreeable mental make-up, he will exhibit anomalies of temper similar to those of a child with a sore finger towards those who have a right to claim his fostering care and protection. If the relation of cause and effect be traced, it were impossible to arrive at the conclusion that alcohol prevents "waste of tissue," but promotes it, as the action to expel it is prompted by the nerves and executed by the muscular structures. These are *vital* actions, and as certainly result in the atomic death of the structures involved, as "action" does to any other tissues of the body. There is a similar destruction of tissue in the processes of digestion, circulation, respiration, etc., but this expenditure is *normal*, as there is a legitimate return in vitalized reconstructing material.

Its Heat Forming Properties.

An intimation of the proper source of animal heat is derived from "The correlation of Forces," a work recently compiled by Prof. Youmans, of New York, author of a text book on chemistry. The work is an embodiment of the views of five eminent scientists of Germany, England and the United States, who simultaneously, and without the knowledge of each other, discovered the same general principles in nature. Briefly:

There is a fund of force, as there is of matter in the universe, and, like matter, it is indestructible, but convertible into heat, and *vice versa*. The application of this general principle irresistibly leads to the conclusion that animal heat is the result of, and depends upon, *action* in and of the vital domain. Whether it is chemical, vital, mental or physical, the force expended is resolved into *heat*. The term "animal heat," in its special signification, refers to the result of *vital force*—The action of the vital organs in performing the vital processes under the supervision of the involuntary or vital nerves. The sum total of the work performed is the rebuilding of tissue, and the removal of all unvitalized matter, whether it is the result of ingesta, or the debris of broken down structures. Alcohol is an "irritant poison" which is obnoxious to the vital instincts, and its presence arouses the nervous energies to action for the purpose of expelling it, and the force thus expended is resolved into heat. This is a prodigal expenditure of force because it gives no return in re-constructed tissue. The substance is offensive, the action is vigorous, force is rapidly expended and the temperature is unduly elevated. The action soon diminishes, for the latent force is soon expended, and the temperature falls below the normal standard.

The "temperance man" if he be intelligent, will take a limited quantity of properly selected food, and thus impart to it a high standard of vitality. This will cause a large fund of force to be stored up in the tissues to be expended in protecting the vital domain against "all comers;" if heat, the blood will be sent to the surface of the body, its water will be imparted through the pores to unite with the adjacent atmosphere in

the form of vapor; if cold the circulation will be directed to the surface, the force thus expended will be resolved into heat and the surface protected from freezing; if alcohol is introduced the absorbants will remove it to the circulation, which will be increased to carry it to the depurating organs, where it will be ejected as an offensive intruder; if properly selected food is introduced in the customary way, the process of digestion will be established, and it will be transformed into living tissue; if an insidious poison is gradually introduced, when it has accumulated sufficiently to endanger the well-being of the system, the process of digestion will be suspended and the nervous energies will be engaged in its removal, and when the people become as intelligent as they ought to be they will recognize this as one of the many kinds of "fever" the name of which will depend on the mode of warfare adopted by the vital instincts. Then will diseased conditions cease to be inexplicable, and the *art* curative will be elevated to the dignity of a SCIENCE.

The "temperate man," if he remains as at present, will continue to fail in distinguishing the difference between foods and poisons, use a "little" of everything, according to his standard of "moderation," and continue to constitute the ranks from which drunkards are recruited, and after having worked himself into the "gutter" will probably conclude that he is more "humiliated" by being "intoxicated" than "signing a temperance pledge."

In concluding this part of this interesting subject, I would suggest that "Microscope" constitute himself a scientific instrument of larger proportions, take a more *distant* view of the liquor business, as he can see more of the situation, and he will probably arrive at more correct and much safer conclusions.

Alcohol as a Medicine.

Much that has been advanced against the "food" properties of alcohol, applies with equal force to its objection as a "medicine." Its true place and value as either can only be ascertained, by tracing its relation to the living tissues when brought into immediate contact. It will not be denied that the energy referred to as originating in and emanating from the ganglionic nervous system, and designated "vital," exists, to a greater or less extent in every form of animal creation, and, which is specially prominent in large and well formed men, even if its "seat" of origin is still disputed by some. This energy is an intelligence which presides over the internal or vital interests just as much as mental force is the intelligence that enables us to take cognizance of our external surroundings; and it is competent to, and does continually discriminate between substances that can be used by it in rebuilding the various tissues, and those that cannot. Selecting such as can, provided always that all of the necessary conditions are supplied, be used in the rebuilding processes, and rejecting such as cannot be so used. It will be seen, then, that substances possessing all of the characteristics of the most easily appropriated foods may be rejected by this vital intelligence, if the requisite conditions are wanting. When this occurs digestion is delayed, and the food may be sent back by regurgitation, the peristaltic action be increased and diarrhoea ensue, or, if the vital nervous energies have been previously exhausted by injudicious habits, it may passively be allowed to remain to be comminuted by "fermentation" which is simply a rotting process, taken into the circulation, and removed through the depurating outlets. In the latter case, as previously intimated, the sacharine and amylaceous elements will be converted into carbonic acid gas and alcohol.

The above facts show most conclusively that the vital instincts are ever on the alert to guard the body from contact with unvitalized matter by removing it from the system. The energy expended will be proportionate to the objectionable character of the substance; and as alcohol is a "caustic and irritant poison" it is only reasonable that a vigorous effort should be made to expel it. This action or effort will vary (1) according to the percentage of alcohol contained in the liquor used, and (2) according to the nervous energy possessed by the individual. This is the point at which our temperance advocates, and nearly all physicians who have opposed the use of alcohol as a medicine, have failed. They see and can easily understand from observing its effects when taken by persons who are not ill that its use is fraught with danger; but it has almost invariably been admitted that when the vital forces were exhausted, a *stimulant of some kind was necessary*, and, as alcohol is known to be one of the readiest and "most reliable," it has been resorted to. When it is known that "*stimulation" is an expenditure of positive vital force for the purpose of expelling an offensive substance* we will not fail to resist its exhibition in all cases. For the danger accompanying its use increases as the strength of the individual diminishes. A financier would be looked upon as reckless who increased his lavish expenditure when his capital was almost gone.

The idea that alcohol can in any possible way aid in restoring sick persons to health is purely hypothetical. It has been assumed that it is good, and all kinds of supposed facts have been stated with the most positive assurance as evidence of its conferred benefits. To show the inconsistency of those who believe in it I quote from "Alcohol, its place and power" by James Miller, F.R.S.E., F.R.C.S.E., &c., a revised edition of which was published so late as 1873. This book was written by request, and, in the interests of the TEMPERANCE CAUSE, and is looked upon by temperance people as a most excellent authority, yet there is scarcely a page that does not contain the most errant nonsense. "With less than no power to avert disease, though with considerable power, when given medicinally, in suitable circumstances, to modify and restrain it, the power of alcohol to produce disease, when taken unnecessarily and in excess, is all but incalculable. Who has not stood amazed at the impudence of the quack, who unblushingly advertieses his nostrums, warranting it to cure all, or almost all, the diseases that flesh is heir to? Alcohol were no quack, were it to claim an equal power; not, indeed, in the way of cure, but in the way of production 'methinks it doth protest too much!' 'Nay but it will keep its word.' Diseases of the brain, of the lungs, of the heart and arteries, of the stomach and bowels, of the liver, of the kidneys, of the skin, gout and rheumatisms, dropsies, palsies, scrofula, premature decay; general poisoning, delirium, epilepsy, fatuity, madness—these are but a part of the long black list that might in sad and sober truth be enumerated, as more or less directly caused by alcohol."

The above is a specimen paragraph, stating the injuries that result from it use when taken as a beverage, most truthfully, and yet, claiming special advantages when prescribed as a "medicine." I declare with the most positive assurance, that it is impossible, by the most careful investigation of natural laws, when applied to the characteristics of alcohol, or to the living structures, to show that it can be of any advantage in preventing disease, or in restoring persons to health, but is a fertile cause of disease, and also, of premature death; and I *know* that it is impossible for any one to rationally explain its advantages. Page after page could be quoted in condemnation of it when used habitually, while its medicinal properties are as strongly defended. Such trash, palmed off as "Medical Science," is most disgusting. There is no possibility of its being anything but an enemy to the vital instincts. It burns the stomach, disorganizes the gastric fluid, and arouses the vital forces to resist it as a death-dealing assailant, and this expenditure of force has been mistaken for a production of it. If a general, having the welfare of his country at stake, and which depended upon the proper manœuvering, care and attention of his army, should voluntarily introduce small-pox to gradually decimate his ranks, he would be looked upon as wholly unfit for his position; yet this is precisely a parallel case. The welfare of our body depends upon a strict performance of the repairing processes, and the removal, from the vital domain, of all impurities of whatever nature; and when this important work has been impeded and prevented, and the vital forces are struggling to accomplish the task it has in hand, alcohol, a "caustic and irritant poison" is introduced, which only adds to the burdens already to be borne.

Alcohol is so offensive that it not only adds to the ordinary burdens, but it diverts the nervous energies from the accomplishment of the work in hand, to expel a newly introduced and more dangerous substance. It is upon this principle that it apparently "cures" so many little ailments or annoyances. "Wine is a *mocker*, strong drink is raging, and whosoever is deceived thereby is not wise:" yet the medical profession have been most sadly deceived by it, and none more so than Dr. Miller, notwithstanding the numerous titles with which his name has been embellished, with the possible exception of those who have designated it the "*elixir of life*." In treating of "alcohol as a medicinal agent" Dr. M. says:—"From among the fiercest poisons, as just hinted, come some of our most valued medicines." This statement is made with an entire misapprehension of the facts, established by natural laws. The modified views of the profession during the last 30 years is proof of this. At that time the 'measels' were looked upon as a dangerous disease, and many of those 'fiercest poisons' were supposed to be necessary, and were given, with the result, that quite a percentage of such patients died. Now, no medicines are supposed to be necessary and a death is of the rarest occurrence in the management of this malady. This view is borne out by a reference to the best medical authority of the day. Sir William Gull, M.D., F.R.S., F.C.P., Physician Extraordinary to the Queen, Physician in ordinary to H.R.H., the Prince of Wales, and consulting physician to Guy's Hospital, gave the following evidence before the Select Committee of the House of Lords on Intemperance, July, 1877.

The Archbishop of York.—"Could you undertake to treat a fever without alcohol?"

"Yes; it was constantly my practice at Guy's Hospital, if I had young subjects, not to give alcohol, for the express purpose that my students should see the course of the disease, and learn how it could be cured; I cured many cases of typhus in young subjects under 25 years of age with chamomile tea."

"And with no other remedy?"

"With no other remedy but light diet."

"In those cases where there is a sound constitution and a young patient any administration of alcohol might be deemed to be an interference with the natural course of the disease, and would not do good?"

"Quite so; I would like to say that I believe there is still an error with regard to the value of alcohol in disease.

"Will you state to the committee what that error is?" "I think the error prevalent is that alcohol cures the disease, *whereas the disease runs its physiological* (pathological) *course irrespective of the alcohol.* The advantage of alcohol is, if it has an advantage, its effects on the nervous system for the time being, rendering the patient more indifferent to the process going on. I am disposed also to believe, although I think we could not do without alcohol as a drug, that it is still over-prescribed; I think that instead of flying to alcohol, as many people do when they are exhausted, they might very well drink water, or that they might very well take food, and would be very much better without the alcohol."

I have made these somewhat lengthy quotations for the purpose of showing that Dr. Gull, with his more recent experience is much less confident, to say the least, than Dr. Miller who wrote some years before; there are, also, other points in Dr. Gull's statements that deserve attention in this connection; one would almost think from reading his statements that he had arrived at correct conclusions, positively, and that his guarded statements were designed to defend himself against attacks, or at least the odious opinions of such men in the profession as Dr. Miller, who are so pronounced in favor of its use, for they are numerous, and not without their influence; but it is more probable that he, like the rest of the profession, is mistaken in supposing that the action is on the part of the alcohol, whereas *it* is entirely passive, the action being on the part of the vital forces to expel an offensive substance. He is evidently in doubt, as if only a glimmer of the light of real truth was seen in the distance. It is a hopeful sign that so many are led to see from their experience and observation that it is a most dangerous element with which to deal, and that the mistaken notions with which they were cradled are giving place to rational views, which are in strict accordance with well understood natural laws.

It is highly important that the lessons of the past be treasured up, in order that we may be enabled to avoid a repetition of past errors, and to shun the "rocks" upon which our ships have foundered aforetime; and, with the strong conviction of an imperative duty, I may be permitted to refer to the late Prince Consort, whose death we all so much deplore. This unlooked for event suddenly plunged the entire nation into mourning, and deep regret is still felt for the loss of so noble a character. According to the report of his medical advisers: On Sunday, the 8th of December, 1861, he had a "feverish cold." On the Wednesday and Thursday following there were no unfavorable symptoms; on Friday he was worse, and on Saturday his death occurred, which was certified to be of "Typhoid Fever." We also learn that on the 7th day his system failed to respond to the stimulus. "Refused to respond" is the term used in the report.

The *Lancet*, in commenting upon his death, intimates that the wealthy class suffer worse from this malady than the laboring part of the community. The comments of the *Lancet* convey the idea that an apology was due for the results of the practice in connection with his case. He was in the "prime" of life, his habits were very exemplary, and he certainly had all the advantages that sanitary arrangements could afford, and I do not consider it beyond the bounds of reason to conclude that *his life was rendered up as a sacrifice to the delusion of* ALCHOLIC MEDICATION. His nervous energies being continuously exhausted by the exhibition of this offensive poison. And there is every reason to believe that ten years later, in 1871, H. R. H. the Prince of Wales' life was SAVED by the discontinuance of brandy, and the substitution of a very little milk, which was used as food to nourish the tissues, as nature designed. Since that time milk has been looked upon as a "prophelactic" for typhoid fever, and thousands of valuable lives have been sacrificed by its being prescribed in such quantities that the *vital forces* were incompetent to digest it, and *its* continuous imposition exhausted the vital energies to such an extent as to cause death from collapse of the lungs. Who is there, excepting a large number of stupids that have mistaken their vocation by going into "medicine," that does not know that milk, like all other kinds of food, is "feverish," when it is taken in such quantities that it cannot be digested? And that this "feverishness" is an *action* of the vital forces to expel useless material, which would

have been excellent food had the necessary conditions been supplied for transforming it into tissue.

This essay would be incomplete without a few words in reference to poisonous substances used in the manufacture and adulteration of alcoholic liquors, for the purpose of increasing the already large profits.

Strychnine, stramonium, belladonna, tobacco, cocculus and opium are all substances that the vital instincts abhor, and are classed as deadly poisons. They are all used in the liquor business for the purpose of supplying stimulating and narcotic properties, which are characteristics of alcohol. A STIMULANT is something that is obnoxious to the vital instincts, which is readily taken up by the vital forces and carried to the various outlets of the body, called the depurating organs, for the purpose of expelling it from the vital domain. The poison must be in such small quantity that the nervous energy is competent to remove it readily, and the circulation must not be diverted from the surface of the body, but, rather, tend in that direction, imparting to the surface a slightly flushed appearance. All stimulants become or cause a NARCOTIC effect when taken in sufficient quantity to *demoralize the nervous energy*, which is indicated by the blood being determined on the internal viscera, which leaves the surface in a flaccid state and of a purplish color. As stimulation varies from a very slight exhilaration to a full or flushed determination towards the surface, so does narcotism vary from a slightly depleted and discolored surface to one of extreme flaccidity and discoloration.

The above enumeration are all deadly poisons, and, in sufficient quantity, cause burning pain in the aesophagus and stomach, frequently not relieved by vomiting, vertego, convulsions, amaurosis, and tendency to inguinal hernia or rupture, paralysis of voluntary muscles, purging, coldness, clammy sweat, torpor and death. Other poisons are also substituted for alcohol to the number of about thirty, such as, digitalis, arnica, cocoa, aconite, nux vomica, besides numerous minerals and mineral acids. The ingredients of a warming nature that are also used are pepper, capsicum, cloves, ginger, spices, acetic acid, tartaric acid, citric acid, butyric acid, cream of tartar, nitric acid, sulphuric acid, prussic acid, sulphuric ether, nitric ether, acetic ether, spirits of nitre, oil of turpentine, oil of cassia, oil of carroway, oil of cloves, extract of angelica, grains of paradise, juniper berries, aloes; cochineal, black ants and Spanish juices are also used in the manufacture of so called alcoholic, commercial beverages. To give *taste* and *astringency* bruised raisins, dried blackberries, dried peaches, dried cherries, orange peel, coriander seeds, white oak bark, tanic acid, catechu cardomon seed, fennel seed, wormwood, coperas or blue vitriol, lime water, carbonate of lime, carbonate of soda, nitrate of potash, caustic potash, pearl ash, salaratus, sugar of lead, and litharge are used to correct the unnatural taste; burnt sugar, beet juice, elderberries, treacle and logwood are used as coloring matter.

The substitution of these ingredients is an old and very common practice. The parties who manipulate them are usually defective in intelligence as to their real characteristics, and are utterly incompetent to be entrusted with them. While many of them are comparatively harmless, not a few are among our most deadly poisons, and do not afford any comfort to those who take even wine in limited quantity in the vain delusion that it will benefit their health, or for "sacramental" and social purposes.